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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/484,911	01/18/2000	Junichi Hagiwara	1503.63544	1265

7590

11/06/2003

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 11/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/484,911

Applicant(s)

HAGIWARA ET AL.

Examiner

Jean B Fleurantin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 26, 2003 has been entered. Claims 1-19 remain pending for examination. Examiner discusses the newly added limitations of claim 19 in the following rejection.

Specification

2. Figures 1A and 1B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5,454,105 issued to Hatakeyama et al. (hereinafter "Hatakeyama").

As per claims 1, 11, 12 and 15, Hatakeyama discloses a search system comprising: "an inputting device inputting query specification information which collectively specifies a plurality of times of a full text search through a plurality of search condition combinations for a comparison of a plurality of search results from the plurality of times of the full text search" as a method and a system for carrying out the same, in which a full text search system having a plurality of terminals connected thereto is capable of furnishing results of search to the relevant terminals with a quick response time which is equivalent in appearance to that attainable in the processing performed for a search request issued by a single terminal, (see col. 2, lines 4-11), "each of the combinations representing any search query which includes a plurality of search conditions" as the search processing is performed for finding out the document which can satisfy any one of the query conditions or statements given by the search requests, (see col. 3, lines 53-560, "combined by logical operators, for single time of the full text search" as a means for

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performing the search processing by ORing the search requests and logically ANDing the search results obtained on a request source basis, (see col. 8, lines 37-39); and

“wherein each of the search condition combinations is not combined with any other of the search condition combinations by a logical operator” as a means for performing the search processing by ORing the search requests and logically ANDing the search results obtained on a request source basis, (see col. 8, lines 37-39), and

“wherein each of the search results is output as a search result which is compared with another of the search results by a user” as the character string affixed with the multiple matching term ID is hit in the course of the search, in which the multiple matching ID table is consulted, to thereby output as the result of the search a plurality of term IDs registered in that table, (see col. 13, lines 24-28). Hatakeyama does not explicitly disclose an instruction device instructing the specified plurality of times of the full text search, text information specified by each of the combinations being searched for in each time of the full text search. However, Hatakeyama discloses steps of control program accepts the search requests sequentially while the character string search processing for a search request is being executed, (see col. 11, lines 45-48); and performing a the full text search and that search requests are frequently issued from each of the individual terminal, (see col. 1, lines 48-50). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify an instruction device instructing the specified plurality of times of the full text search, text information specified by each of the combinations being searched for in each time of the full text search as taught by Hatakeyama. Such modification would allow the teachings of Hatakeyama to improve the accuracy and the reliability of the search system and method based on search condition combinations, and to

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provide a document information search in which a full text search system having a plurality of terminals connected thereto is capable of furnishing results of search to the relevant terminals with a quick response time which is equivalent in appearance to that attainable in the processing performed for a search request issued by a single terminal, (col. 2, lines 3-11).

As per claim 2, Hatakeyama discloses, wherein said inputting device inputs the query specification information in a form of a table, (see col. 21, lines 40-42).

As per claim 4, in addition to the discussion in claim 1, Hatakeyama further discloses “a changing device changing a portion of search conditions included in the query specification information” as a method and a system for carrying out the same, in which a full text search system having a plurality of terminals connected thereto is capable of furnishing results of search to the relevant terminals with a quick response time which is equivalent in appearance to that attainable in the processing performed for a search request issued by a single terminal, (see col. 2, lines 4-11).

As per claims 5, 13 and 16, in addition to the discussion in claim 1, Hatakeyama further discloses “an outputting device collectively outputting output information corresponding to the plurality of search results for a comparison of the plurality of search results” as a completion of a character string search processing for said plurality of search requests, distributively outputting the results of said search processing to the associated search request sources on the basis of said identification information, (see col. 22, lines 37-40).

As per claims 6-7 and 9-10, the limitations of claims 6-7 and 9-10 are rejected in the analysis of claim 5, and these claims are rejected on that basis.

As per claim 8, Hatakeyama further discloses ‘a reflecting device reflecting a search result regarding a changed portion on the output information when the portion of search conditions included in the plurality of search condition combinations is changed” as a method and a system for carrying out the same, in which a full text search system having a plurality of terminals connected thereto is capable of furnishing results of search to the relevant terminals with a quick response time which is equivalent in appearance to that attainable in the processing performed for a search request issued by a single terminal, (see col. 2, lines 4-11).

As per claim 14, in addition to the discussion in claims 1 and 5, Hatakeyama further discloses “performing an information search based on specified information” as a means for searching said first combined search object to locate a plurality of documents satisfying each search condition of each of said plurality of search request sources, (see col. 22, lines 4-8).

As per claim 17, in addition to the discussion in claims 1 and 16, Hatakeyama further discloses “at least one of the search condition types including a plurality of search condition elements” a logical condition decision program for making "AND" and "OR" decisions between the retrieved character strings as outputted from the character string search program, (see col. 10, lines 20-23).

As per claim 18, in addition to the discussion in claims 1 and 17, Hatakeyama further discloses “multi-dimensional query specification information specifying a plurality of search condition types” as the search processing is performed for finding out the document which can satisfy any one of the query conditions or statements given by the search requests, (see col. 3, lines 53-56).

4. Claims 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5,454,105 issued to Hatakeyama et al. (hereinafter “Hatakeyama”) in view of US Pat. No. 5,452,451 issued to Akizawa (“hereinafter “Akizawa”).

As per claim 3, in addition to the discussion in claim 1, Hatakeyama does not explicitly disclose step of a generating device automatically generating the plurality of search condition combinations based on the query specification information. However, Akizawa discloses a full text search using the automaton, (see col. 3, lines 18-190, and column 6, lines 60-62. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Hatakeyama and Akizawa with generating device automatically generating the plurality of search condition combinations based on the query specification information. Such modification would allow the teachings of Hatakeyama and Akizawa to provide a symbol string search method in which the improvement of a processing speed in a document search based on a full text search using an automaton is intended by

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reducing the frequency of input/output of data between automaton executing means and a memory, (see col. 4, lines 63-68).

As per claim 19, in addition to the discussion in claims 1 and 17, Hatakeyama does not explicitly disclose step of a generating device automatically generating the plurality of search expression which all possible combinations of the search conditions registered to the input array. However, Akizawa discloses a full text search using the automaton, (see col. 3, lines 18-190, and column 6, lines 60-62. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Hatakeyama and Akizawa with a generating device automatically generating the plurality of search expression which all possible combinations of the search conditions registered to the input array. Such modification would allow the teachings of Hatakeyama and Akizawa to provide a symbol string search method in which the improvement of a processing speed in a document search based on a full text search using an automaton is intended by reducing the frequency of input/output of data between automaton executing means and a memory, (see col. 4, lines 63-68).

Prior Art

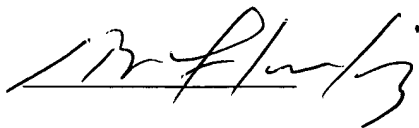
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kirsch et al. U.S. Patent No. 5,845,278 relates to full text document searching and retrieval.

Conclusion

6. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: ***After Final*** (703) 746-7238, ***Official*** (703) 746-7239, and ***Non-Official*** (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.



Jean Bolte Fleurantin

10/28/03

JBf/